

Application No.: not yet assigned

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A nucleic acid detection method comprising:
~~a sample fixing step of~~ fixing a cell-containing sample in divided compartments of a support;
~~a nucleic acid exposing step of~~ exposing nucleic acids contained in the sample;
~~a nucleic acid amplifying step of~~ performing PCR by placing a PCR mixture, containing primers for amplifying a target nucleic acid, into the compartments of the support; and
~~a determining step of~~ determining whether amplified nucleic acids in a PCR solution ~~contains~~contain the target nucleic acid.
2. (Cancelled)
3. (Currently Amended) [[A]] The nucleic acid detection method as set forth in claim 1, wherein the nucleic acid exposing step is performed by one or more methods selected from the group consisting of a detergent treatment method, an enzyme treatment method, and a heat treatment method.
4. (Cancelled)
5. (Currently Amended) [[A]] The nucleic acid detection method as set forth in claim 1, wherein the amplified nucleic acids are labeled in the ~~nucleic acid amplifying step of performing~~ PCR.
6. (Currently Amended) [[A]] The nucleic acid detection method as set forth in claim 5, wherein, in the determining step, a target nucleic acid is detected if there is complementary hybridization of known gene fragments with probes, for which the nucleic acids amplified and labeled in the ~~nucleic acid amplifying step of performing~~ PCR are used.

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7. (Currently Amended) ~~[[A]]~~ The nucleic acid detection method as set forth in claim 6, wherein the known gene fragments are fixed on the support in advance.

8. (Currently Amended) ~~[[A]]~~ The nucleic acid detection method as set forth in claim 5, wherein, in the determining step, a target nucleic acid is detected with use of a DNA microarray and probes, for which the nucleic acids amplified and labeled in the ~~nucleic acid amplifying step of performing PCR~~ are used.

9. (Currently Amended) ~~[[A]]~~ The nucleic acid detection method as set forth in ~~any one of claims 1 through 8~~ claim 1, wherein the sample originates in biological sources.

10. (Currently Amended) ~~[[A]]~~ The nucleic acid detection method as set forth in claim 9, wherein the biological sample originates in humans.

11. (Currently Amended) A gene detecting kit for detecting a target gene in a sample according to a nucleic acid detection method of ~~any one of claims 1 through 10~~ claim 1.

12. (Original) A gene detecting kit for detecting a disease-associated gene of humans according to a nucleic acid detection method of claim 10.

13. (Currently Amended) ~~[[A]]~~ The gene detecting kit as set forth in claim 12, wherein the disease-associated gene of humans is a gene of infection-causing microbes that have infected humans.

14. (Currently Amended) ~~[[A]]~~ The gene detecting kit as set forth in claim 13, wherein the gene of infection-causing microbes that have infected humans is a drug-resistant gene.

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15. (Currently Amended) [[A]] The gene detecting kit as set forth in claim 13, wherein the gene of infection-causing microbes that have infected humans is a drug-sensitive gene.

16. (Currently Amended) [[A]] The gene detecting kit as set forth in claim 12, wherein the disease-associated gene of humans is a marker gene for cancer.

17. (Currently Amended) [[A]] The gene detecting kit as set forth in claim 12, wherein the disease-associated gene of humans is a genetic disease-associated gene.

18. (Currently Amended) [[A]] The gene detecting kit as set forth in ~~any one of claims 11 through 17~~ claim 11, which comprises: a target gene amplifying primer; PCR reaction buffer; a mixture of deoxynucleoside triphosphate; labeled deoxynucleoside triphosphate; thermostable DNA polymerase; a sample-fixing support; and an indicator for detecting amplified nucleic acids.

19. (Currently Amended) [[A]] The nucleic acid detection method as set forth in claim 1, wherein the support with the divided compartments is shaped to fit a gene amplifier for PCR (thermal cycler).

20. (Currently Amended) [[A]] The nucleic acid detection method as set forth in claim 1, wherein, in the determining step, the target nucleic acid is detected by electrophoresis.